## EXAMINATION ANNOUNCEMENT



## **CALIFORNIA ENERGY COMMISSION**

# ENERGY COMMISSION SPECIALIST I (Forecasting)

### **OPEN**

### **EXAMINATION PLAN**

**SUPPLEMENTAL QUESTIONNAIRE** – **WEIGHTED 100%.** The entire examination will consist of a Supplemental Questionnaire. The Supplemental Questionnaire is designed to elicit a range of specific information regarding each candidate's knowledge, abilities, and experience to effectively perform the duties relative to the classification(s). Responses to the Supplemental Questionnaire will be evaluated using predetermined rating criteria; therefore, it is imperative that you put time and effort into completing the Supplemental Questionnaire. In order to obtain a position on the eligible list, a minimum rating of 70% must be obtained.

All internet postings of this bulletin have the Supplemental Questionnaire attached at the end (Please scroll down).

## FILING INSTRUCTIONS

**CONTINUOUS TESTING – NO FINAL FILING DATE** – Testing is considered continuous as state applications (STD 678) and Supplemental Questionnaires will be accepted on a continuous basis. You may apply only once in any consecutive 12 month period. Applications and Supplemental Questionnaires will be reviewed and scored once per month with a cutoff date of the 15<sup>th</sup> of each month. All applications received after the 15<sup>th</sup> will be held until the following month. Applications and/or resumes submitted via facsimile (FAX) machines, or electronically mailed (e-mail) will not be accepted.

### FILE BY MAIL OR IN PERSON WITH:

California Energy Commission Selection, Training & EEO Office (ECS I) (FO) 1516 Ninth Street, MS #52 Sacramento, CA 95814

In order to expedite the application review process, when completing the State application make sure to provide a full description of duties performed.

## DO NOT SEND SUPPLEMENTAL QUESTIONNAIRE AND STATE APPLICATION TO THE STATE PERSONNEL BOARD

Applications may be obtained at the State Personnel Board, any Employment Development Department in California, the California Energy Commission or the Internet at <a href="http://www.spb.ca.gov/jobs/stateapp.htm">http://www.spb.ca.gov/jobs/stateapp.htm</a>.

A mandatory Supplemental Questionnaire must be completed and submitted with a standard State application (STD 678). Applications received without the Supplemental Questionnaire or vice versa will not be accepted. If you have any questions, please call (916) 653-6532.

ENERGY COMMISSION SPECIALIST I (FORECASTING) BJ52 - 4947

7ERA1-02

www.energy.ca.gov (916) 653-6532

Final File Date: Continuous Testing

## SPECIAL TESTING ARRANGEMENTS

If you have a disability and need special testing arrangements, mark question #2 of the "Application for Examination." You will be contacted to make specific arrangements.

Bulletin Release Date: October 21, 2008

### **SALARY RANGE**

\$4833 - \$5831

# REQUIREMENTS FOR ADMITTANCE TO THE EXAMINATION

It is your responsibility to make sure you meet the education and/or experience requirements stated below by the final filing date. Your signature on your application indicates you have read, understood and possess the basic qualifications required. All applications/resumes must include: "to" and "from" dates (month/day/year); time base (full-time/part-time/number of hours per week/month); and civil service class titles where applicable. Applications/resumes received without this information will be rejected.

### MINIMUM QUALIFICATIONS

Qualifying experience may be combined on a proportionate basis if the requirements stated below include more than one pattern and are distinguished as 'Either' I 'or' II 'or' III, etc. For example, candidates who possess qualifying experience amounting to 50% of the required time of Pattern I, and additional experience amounting to 50% of the required time of Pattern II, may be admitted to an examination as meeting 100% of the overall experience requirement.

Please note: When combining patterns all experience converts to the largest experience requirement.

### EITHER I

In the California state service, one year of experience performing forecasting duties in areas related to supply and demand of electricity, fuels, transportation and other energy uses; energy pricing; shortage contingency planning; including duties such as econometric modeling, linear programming, and cost benefit analysis at a level of responsibility equivalent to Associate Energy Specialist.

### OR II

**Experience:** Four years of responsible technical experience in one or more of the areas of energy pricing, shortage contingency planning; including duties such as econometric modeling, linear programming, and cost benefit analysis, including two years of experience above the trainee level. A master's degree in a field related to one of the specialties may be substituted for one year of experience; while a doctoral degree may be substituted for two years of the required experience. Only one postgraduate degree may be counted towards experience. (Completion of dissertation research for a doctoral degree in a field appropriate to one of the Energy Commission specialties may be substituted for up to one year of the required experience.)

#### AND

<u>Education</u>: The following education is required when non-California state service experience is used to qualify at any level: Equivalent to graduation from college. Additional experience may be substituted for the required education on a year-for-year basis.

### THE POSITION

Energy Commission Specialist I (Forecasting) positions are characterized by incumbents independently performing more complex, sensitive and responsible energy-related work which requires, on a regular basis, a high level of knowledge, skill and ability which is demonstrably above the journey level. Incumbents in this class will usually possess technical expertise in one or more energy-related fields. Incumbents perform a broad range of duties within the program specialty. Incumbents may exercise some lead responsibility as Project Managers. Incumbents may be responsible for minor Commission reports and may lead other Energy Commission Specialists I in carrying out project responsibility.

Positions exist in Sacramento with the California Energy Commission.

### **SCOPE**

To evaluate each competitor's relative abilities as demonstrated by quality and breadth of

experience, emphasis in the Supplemental Questionnaire will be to measure competitively, relative to job demands, each competitor's:

### KNOWLEDGE OF

- 1. A wide range of electricity, fuels and energy technologies and associated forecasting methodologies and issues;
- 2. Energy demand forecasts and supply analytic methodologies, energy policy issues affecting or resulting from energy technology development, and energy project management techniques;
- 3. California Public Resource Code pertaining to energy resources conservation and development;
- 4. Principles of physical sciences and engineering involved in fuels and energy production, transmission, utilization and conservation;
- Principles of econometric, engineering and end-use energy demand forecasting, conservation impacts forecasting, fuel and electricity price forecasting, new demandreducing technologies growth forecasting, computer modeling, statistical sample design, data collection, data base development and monitoring, utility and other forecasting methods;
- 6. Commercially available energy conservation and alternative energy generation technologies;
- 7. Principles of engineering economics, financial analysis, and economic theory as it pertains to energy supply and demand;
- 8. Energy technology costs and cost-accounting methods;
- 9. Industrial energy conversion technologies, thermodynamic analysis of heat loads in buildings, and direct energy use surveys;
- 10. General provisions of social and economic implications of fuels and energy demand forecasting, resource planning and facility construction;
- 11. Recent research and development projects related to the use of electricity, petroleum, natural gas, biomass and other synthetic fuels;
- 12. Principles and procedures of environmental impact assessment, energy supply and demand forecasting, safety standards review and assessment, and fuels development and utilization;
- 13. Principles of program evaluation and planning and energy policy analysis and formulation;
- 14. Decision theory, probabilistic risk assessment, and techniques of comparative evaluation:
- 15. Federal, State and local governments, utilities and private agencies involved in energy forecasting, research and regulation.

### **ABILITY TO**

- Reason logically and creatively and use a variety of analytical and research techniques
  to resolve complex electric energy and fuels development, energy conservation and
  development programs;
- 2. Utilize available computer systems for data base and/or computational applications;
- 3. Develop and use complex computer programs and forecasting models;
- 4. Develop and evaluate fuel alternatives;
- 5. Perform policy analysis and formulate policy recommendations;
- 6. Act as team or project leader;
- 7. Manage contracts;
- 8. Analyze energy data and present ideas and information effectively both orally and in writing:
- 9. Gain and maintain the confidence and cooperation of those contacted during the course of work;
- Acquire and prepare energy use and other data relevant to energy demand forecasting and fuel-related issues;

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- 11. Critique and diagnose the performance of energy forecasting and resource planning and policy forecasting models;
- 12. Evaluate and quantify the effect of conservation programs on energy demand;
- 13. Present ideas and analysis cogently and effectively;
- 14. Consult with and advise Office Managers, Division Administrators, Commissioners and other interested members of the State energy community on a wide variety of forecasting and fuel-related subject-matter areas;
- 15. Analyze situations accurately, take effective action and act independently within the guidelines set forth by the Commission.

## ELIGIBLE LIST INFORMATION

A departmental open eligible list will be established for the California Energy Commission. The list will be abolished 12 months after it is established unless the needs of the service and condition of the list warrant a change in this period.

VETERANS
PREFERENCE POINTS

WILL NOT BE GRANTED IN THIS EXAMINATION

**CAREER CREDITS** 

DO NOT APPLY IN THIS EXAMINATION

ONLY INDIVIDUALS LAWFULLY AUTHORIZED TO WORK IN THE UNITED STATES WILL BE HIRED

### **GENERAL INFORMATION**

Bulletin Release Date: October 21, 2008

**For an examination** without a written feature it is the candidate's responsibility to contact the Examination Unit at (916) 653-6532, three weeks after the final filing date if he/she has not received a progress notice. If a candidate's notice of oral interview or performance test fails to reach him/her prior to the day of the interview due to a verified postal error, he/she will be rescheduled upon written request.

**If you meet the requirements** stated on the reverse, you may take this examination, which is competitive. Possession of the entrance requirement does not assure a place on the eligible list. Your performance in the examination will be compared with the performance of the others who take this test, and all candidates who pass will be ranked according to their scores.

**The California Energy Commission** reserves the right to revise the examination plan to better meet the needs of the service if the circumstances under which this examination was planned change. Such revision will be in accordance with civil service laws and rules and all competitors will be notified.

**Eligible Lists:** Eligible lists established by competitive examination, regardless of date, must be used in the following order: 1) subdivisional promotional, 2) departmental promotional, 3) multi-departmental promotional, 4) service-wide promotional, 5) open eligible list. When there are two lists of the same kind, the older must be used first.

**General Qualifications:** Candidates must possess essential personal qualifications including integrity, initiative, dependability, good judgment and ability to work cooperatively with others; and a state of health consistent with the ability to perform the assigned duties of the class. A medical examination may be required. In open examinations, investigation may be made of employment records and personal history, and fingerprinting may be required.

**Veteran's Preference Points**: Veteran's preference credit is granted only on open list resulting from entrance examinations. These credits are granted to all competitors who qualify for, and have requested these points and who are successful in all parts of the examination. (The examination announcement indicates if veteran's preference points will apply.) Requests for veteran's preference, together with proof of eligibility should be submitted to: State Personnel Board, 801 Capitol Mall, Sacramento, CA 95814, Attention Veteran's desk, MS-37. It is necessary to establish eligibility only once.

Career Credit: A competitor who passes an open, non-promotional civil service examination and who has permanent civil service status (or who has a mandatory right of reinstatement to a position with permanent civil service status) is eligible to receive three career credit points added to his/her earned score. Career credits are not given to persons who have permissive reinstatement privileges. The distinction between mandatory right of reinstatement and permissive reinstatement privilege is outlined in Government Code Sections 19140-19143. (The examination announcement indicates if career credit points will apply.) Veteran's points are not granted in such examinations.

### DO NOT SEND APPLICATIONS TO THE STATE PERSONNEL BOARD

California Relay (Telephone) Service for the Deaf or Hearing Impaired From TDD Phones: 1-800-735-2929 – From Voice Phones 1-800-735-2922

TDD is a Telecommunication Device for the Deaf and is reachable only from telephones equipped with a TDD device.

IT IS AN OBJECTIVE OF THE STATE OF CALIFORNIA TO ACHIEVE A DRUG-FREE WORK PLACE. ANY APPLICANT FOR STATE EMPLOYMENT WILL BE EXPECTED TO BEHAVE IN ACCORDANCE WITH THIS OBJECTIVE BECAUSE THE USE OF ILLEGAL DRUGS IS INCONSISTENT WITH THE LAW OF THE STATE, THE RULES GOVERNING CIVIL SERVICE, AND THE SPECIAL TRUST PLACED IN PUBLIC SERVANTS.



# CALIFORNIA ENERGY COMMISSION SELECTION TRAINING AND EEO OFFICE ASSOCIATE ENERGY SPECIALIST (FORECASTING) AND/OR ENERGY COMMISSION SPECIALIST I (FORECASTING) SUPPLEMENTAL APPLICATION

The California Energy Commission's (CEC) Associate Energy Specialist (Forecasting) and Energy Commission Specialist I (Forecasting) are being given on an open basis. Both examinations will consist solely of this Self-Assessment Supplemental Application Questionnaire.

This questionnaire is designed to elicit a range of specific information regarding each candidate's knowledge, abilities, and experience to effectively perform the duties relative to the classification(s). Candidates are responsible for reading all of the material provided prior to completing the questionnaire. Responses will be evaluated using predetermined rating criteria. In order to obtain a position on the eligible list, a minimum rating of 70% must be attained. Please answer questions completely since incomplete responses and omitted information cannot be considered or assumed. Resumes, letters of reference, and other materials will **not** be evaluated or considered as responses to items in the Supplemental Application.

NOTE: Failure to meet the entrance requirements and/or complete this questionnaire accurately will result in elimination from this examination.) Candidates who fail to follow the instructions and/or solicit input or assistance from others will be eliminated from the examination.

IT IS IMPORTANT THAT YOU RETAIN A COPY OF THIS SUPPLEMENTAL APPLICATION FOR YOUR RECORDS. The California Energy Commission will NOT provide you a copy of your supplemental application.

# I hereby certify and understand that the information provided by me (without assistance from others) on this supplemental application is true and complete to the best of my knowledge and contains no willful misrepresentation or falsifications. I understand this information may be verified. I also understand that if it is discovered that I have made any false representations, I will be removed from the examination process, removed from the list resulting from the examination, may not be allowed to compete in future examinations for State employment and I may be subject to prosecution for misdemeanor or felony offenses under California law. Additionally, State employees may have adverse action taken against them up to and including dismissal. SIGNATURE: DATE: NAME (PRINTED): EXAMINATION TITLE(S):

**Submit Supplemental AND Examination Applications to:** 

California Energy Commission Selection, Training and EEO (AES & ECS I (FO)) 1516 9<sup>th</sup> Street Sacramento, CA 95814

# Associate Energy Specialist (Forecasting) and/or Energy Commission Specialist I (Forecasting) SUPPLEMENTAL APPLICATION

EMPLOYMENT HISTORY
MPLOYMENT HISTORY
current and most recent work experience as it relates sting) and Energy Commission Specialist I (Forecastin sition. The EXPERIENCE CODE will be used in Part clude additional pages if necessary.
ERIENCE CODE A
State: To: Telephone Number:
ERIENCE CODE B
State:
To: Telephone Number:
ERIENCE CODE C
State:
To: Telephone Number:
Telephone Number:
ERIENCE CODE D
Chata
State:
To: Telephone Number:

### Associate Energy Specialist (Forecasting) AND/OR Energy Commission Specialist I (Forecasting) SUPPLEMENTAL APPLICATION

### **PART II - WORK EXPERIENCE**

The Associate Energy Specialist (Forecasting) and Energy Commission Specialist I (Forecasting) classifications are responsible for research and forecasting of supply and demand for electricity, natural gas, or transportation fuels; design and analysis of survey, metering and other data; analysis of energy markets and impacts of government regulations; energy infrastructure assessment; estimation of energy prices; and cost-benefit analysis. Incumbents develop and use models to run scenarios to estimate the effects of various conditions, and to develop and analyze legislation and policies. This section of the application lists activities and requirements necessary for successful job performance. Using the following steps, indicate your level of proficiency and experience for each item.

### Instructions

**Step 1:** In the *Experience Code* column, use the codes from PART I of this form to indicate where you performed the activity, or acquired the task or knowledge. You may list more than one code per item if applicable.

**Step 2**: For each item listed on page 4 in rows "1" through "9", please place an "X" in the column that most accurately represents the experience you have with the following task. Place an "X" in the column which identifies the amount of your experience for each item.

### **SAMPLE**

			EXPERIENCE						<b>AMOUNT OF</b>			
		Experience Code(s)	I have had no education, training, or experience with this task.	I have had education or training on this task, but no application on the job.	I have performed this task on the job under normal supervision.	I have performed this task independently on the lob with little supervision.	I possess 0 to 1 year of experience.	I possess 1 to 3 years of experience.	I possess 3 to 5 years of experience.	I possess 5 or more years of experience.		
	(Sample Item)											
1.	Prepares reports for company.	A & C			X			X				

# Associate Energy Specialist (Forecasting) AND/OR Energy Commission Specialist I (Forecasting)

### **SUPPLEMENTAL APPLICATION - PART II (CONTINUED)**

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INSTRI to indic item if a For each	UCTIONS: In the <i>Experience Code</i> column, use the codes from PART I of this form ate where you performed the activity or task. You may list more than one code per applicable.  The thitem listed below in rows "1 through 10", place ONE "X" in the column which most all yrepresents the type of experience you have with the following tasks. Also, place (" in the column which identifies the amount of your experience for each item.	Experience Code(s) (FROM PART I)	I have had no education, training, or experience with this task.	I have had education or training on this task, but no application on the job	I have performed this task on the job under normal supervision.	I have performed this task independently with little supervision.	I possess 0 to 1 year of experience.	I possess 1 to 3 years of experience.	I possess 3 to 5 years of experience.	I possess 5 or more years of experience.
1.	Collecting accurate and meaningful data.									
2.	Analyzing of data to draw appropriate conclusions and make recommendations regarding a set of data.									
3.	Writing various job-related documents using proper sentence structure, grammar, punctuation, and spelling to ensure complete written materials.									
4.	Using a personal or laptop computer to input data, access information, utilize the internet, and/or create documents (such as reports, memos, electronic mail, spreadsheets, charts, table, graphs, presentation, etc.) using various software applications.									
5.	Identifying facts and implications related to a situation and the pros and cons of proposed alternative before drawing conclusions and making recommendations.									
6.	Assessing supply and demand interactions in energy markets.									
7.	Examining energy use issues and forecasting demand/supply and pricing utilizing econometrics and statistical modeling principles.									
8.	Using specialized software to perform modeling and analyses to forecast energy demand and prices or consumption analysis.									
9.	Making presentations to various groups regarding various topics (e.g., results of analysis, policies and procedures, scientific studies) to facilitate the sharing of information.									

**EXPERIENCE** 

AMOUNT OF TIME

# Associate Energy Specialist (Forecasting) AND/OR Energy Commission Specialist I (Forecasting)

### **PART III - PROJECT EXPERIENCE**

### **Instructions**

- List up to three projects in which you have participated. Please describe each project and its final product, summarizing your role (as sole investigator/researcher, team member, or project leader), responsibilities and timeframe for each project.
- Your response must be typed using 12 point font or larger.
- Your response must be limited to 1 page.
- Clarification and further explanation of your answers may be required during a hiring interview.

# Associate Energy Specialist (Forecasting) AND/OR Energy Commission Specialist I (Forecasting) Supplemental Application

### **PART IV – NARRATIVE QUESTIONS**

You are being given two (2) questions on the following pages for which you are to provide a narrative response. This portion of the examination will be evaluated based on the breadth of your knowledge.

### **Instructions**

- Your response to each question must be typed using 12 point font or larger.
- Your response to each question must be limited to (1) page per question (for a total of 2 pages).
- Answer each question on a separate page and indicate the corresponding number for each response.
- Include the name of the examination, your name, and date on each page.

### **SAMPLE**

Associate Energy Specialist (Forecasting) And/OR Energy Commission Specialist I (Forecasting)							
Name	Date						
Question #1							

### Associate Energy Specialist (Forecasting) AND/OR Energy Commission Specialist I (Forecasting) Supplemental Application

### **MODEL DESIGN AND DEVELOPMENT**

1. Briefly describe the steps you would take in developing a model that could be used for forecasting. Your response should provide specific details of the factors you would consider and elements you would include.

# Associate Energy Specialist (Forecasting) AND/OR Energy Commission Specialist I (Forecasting) Supplemental Application

### **DATA ANALYSIS AND TOOLS**

2. Suppose you are asked to determine whether the State should promote electric vehicles over the next ten years. How would you conduct an analysis to estimate the financial and social impacts of this policy? Describe the elements of your proposed analysis.